

RAW SEQUENCE LISTING

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Application Serial Number: 10/572,175

Source: 1FWP

Date Processed by STIC: 4/10/06

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RAW SEQUENCE LISTING

DATE: 04/10/2006

PATENT APPLICATION: US/10/572,175

TIME: 10:39:00

Input Set : A:\LeA 36 839.ST25.txt

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3 <110> APPLICANT: Bayer HealthCare AG
 4 Golz, Stefan
 5 Markova, Svetlana
 6 Burakova, Ludmila
 7 Frank, Ludmila
 8 Vysotski, Eugene
 10 <120> TITLE OF INVENTION: Isolated Photoprotein mtClytin, and the Use Thereof
 12 <130> FILE REFERENCE: LeA 36 839
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/572,175
 C--> 14 <141> CURRENT FILING DATE: 2006-03-16
 14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/009843
 15 <151> PRIOR FILING DATE: 2004-09-03
 17 <150> PRIOR APPLICATION NUMBER: DE10342670.1
 18 <151> PRIOR FILING DATE: 2003-09-16
 20 <160> NUMBER OF SEQ ID NOS: 9
 22 <170> SOFTWARE: PatentIn version 3.3
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 912
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Clytia gregaria
 29 <400> SEQUENCE: 1
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 34 agattgcaac gcacggcaaa ttttcacacc agcatactct tggctacaga ttcaaaatac 180
 36 gcggtcaaac tcgatcctga' ttttgcaaat ccaaaatgga tcaacagaca caaatattatg 240
 38 ttcaactttt tggacataaa cggtaagggg aaaatcacat tagatgaaat cgtctccaaa 300
 40 gcttcagacg acatttgtgc taaactggat gcaacaccag aacagaccaa acgtcaccag 360
 42 gatgctgttg aagccttttt caagaaaatg ggcattggatt atggtaaaga agttgcattc 420
 44 ccagaattta ttaagggatg ggaagagttg gccgaacacg acttggaact ctggtctcaa 480
 46 aacaaaagta cattgatccg tgaatgggga gatgctgttt tcgacatttt cgacaaagac 540
 48 gcaagtggct caatcagttt agacgaatgg aaggcttacg gacgaatctc tggaatctgt 600
 50 ccatcagacg aagacgctga gaagacgttc aaacattgtg atttggaaca cagtggcaaa 660
 52 cttgatgttg atgagatgac caggcaacat ttaggcttct ggtacacatt ggatccaact 720
 54 tctgatggtc tttatggcaa ttttgttccc taagaagcgt tcagttaaaa acgctaataa 780
 56 ttgttcagtt gtaaaattat attcattttc atttcgtaaa attagtattt ataaatttgt 840
 58 atcataaatt gtatccatgt tgtagactaa ataagactcg gcaaaaaaaa aaaaaaaaaa 900
 60 aaaaaaaaaa aa 912
 63 <210> SEQ ID NO: 2
 64 <211> LENGTH: 228
 65 <212> TYPE: PRT
 66 <213> ORGANISM: Clytia gregaria
 68 <400> SEQUENCE: 2
 70 Met Gln Arg Phe Thr Asn Arg Leu Leu Ser Met Ser Ala Leu Arg Ala

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74 Arg Ser Arg Leu Gln Arg Thr Ala Asn Phe His Thr Ser Ile Leu Leu
75          20          25          30
78 Ala Thr Asp Ser Lys Tyr Ala Val Lys Leu Asp Pro Asp Phe Ala Asn
79          35          40          45
82 Pro Lys Trp Ile Asn Arg His Lys Phe Met Phe Asn Phe Leu Asp Ile
83          50          55          60
86 Asn Gly Lys Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys Ala Ser
87 65          70          75          80
90 Asp Asp Ile Cys Ala Lys Leu Asp Ala Thr Pro Glu Gln Thr Lys Arg
91          85          90          95
94 His Gln Asp Ala Val Glu Ala Phe Phe Lys Lys Met Gly Met Asp Tyr
95          100          105          110
98 Gly Lys Glu Val Ala Phe Pro Glu Phe Ile Lys Gly Trp Glu Glu Leu
99          115          120          125
102 Ala Glu His Asp Leu Glu Leu Trp Ser Gln Asn Lys Ser Thr Leu Ile
103          130          135          140
106 Arg Glu Trp Gly Asp Ala Val Phe Asp Ile Phe Asp Lys Asp Ala Ser
107 145          150          155          160
110 Gly Ser Ile Ser Leu Asp Glu Trp Lys Ala Tyr Gly Arg Ile Ser Gly
111          165          170          175
114 Ile Cys Pro Ser Asp Glu Asp Ala Glu Lys Thr Phe Lys His Cys Asp
115          180          185          190
118 Leu Asp Asn Ser Gly Lys Leu Asp Val Asp Glu Met Thr Arg Gln His
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126 Asn Phe Val Pro
127 225
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152 <212> TYPE: DNA
153 <213> ORGANISM: Clytia gregaria
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158 aacttcatca taatgactga cactgcttca aaatacgctg tcaaactcaa gaccaacttt 120

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164 cttggagcta caccagctca aacccaacgt catcaggaag ctggtgaagc tttcttcaag 300
166 aagattggtt tggattatgg caaagaagtc gaattcccag ctttcgttaa cggatggaaa 360
168 gaactggcca aacatgactt gaaacttttg tcccaaaaca agaaatcttt gatccgcaat 420
170 tggggagaag ctgtattcga cattttcgac aaggacggaa gtggctcaat cagtttgac 480
172 gaatggaaaa catacggagg aatctcttga atctgtccat cagacgaaga cgctgaaaag 540
174 accttcaaac attgcgattt ggacaacagt ggcaaacttg atgttgacga gatgaccaga 600
176 caacatttgg gattctggta caccttggac cctaacgctg atggtcttta tggcaacttt 660
178 gtcccttaaa aacttttttt gctgtaaatt ctttacgggt tattttttca taattgtcat 720
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186 <211> LENGTH: 198
187 <212> TYPE: PRT
188 <213> ORGANISM: Clytia gregaria
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193 1 5 10 15
196 Glu Asp Pro Lys Trp Val Asn Arg His Lys Phe Met Phe Asn Phe Leu
197 20 25 30
200 Asp Ile Asn Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys
201 35 40 45
204 Ala Ser Asp Asp Ile Cys Ala Lys Leu Gly Ala Thr Pro Ala Gln Thr
205 50 55 60
208 Gln Arg His Gln Glu Ala Val Glu Ala Phe Phe Lys Lys Ile Gly Leu
209 65 70 75 80
212 Asp Tyr Gly Lys Glu Val Glu Phe Pro Ala Phe Val Asn Gly Trp Lys
213 85 90 95
216 Glu Leu Ala Lys His Asp Leu Lys Leu Trp Ser Gln Asn Lys Lys Ser
217 100 105 110
220 Leu Ile Arg Asn Trp Gly Glu Ala Val Phe Asp Ile Phe Asp Lys Asp
221 115 120 125
224 Gly Ser Gly Ser Ile Ser Leu Asp Glu Trp Lys Thr Tyr Gly Gly Ile
225 130 135 140
228 Ser Gly Ile Cys Pro Ser Asp Glu Asp Ala Glu Lys Thr Phe Lys His
229 145 150 155 160
232 Cys Asp Leu Asp Asn Ser Gly Lys Leu Asp Val Asp Glu Met Thr Arg
233 165 170 175
236 Gln His Leu Gly Phe Trp Tyr Thr Leu Asp Pro Asn Ala Asp Gly Leu
237 180 185 190
240 Tyr Gly Asn Phe Val Pro
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244 <210> SEQ ID NO: 7
245 <211> LENGTH: 747
246 <212> TYPE: DNA
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256 caaagcttcg gatgacattt gcgccaaact tggagcaaca ccagaacaga ccaaacgtca 240
258 ccaggatgct gtcgaagctt tcttcaaaaa gattggatg gattatggta aagaagtcga 300
260 attcccagct tttgttgatg gatggaaaga actggccaat tatgacttga aactttggtc 360
262 tcaaaacaag aaatctttga tccgcgactg gggagaagct gttttcgaca tttttgacaa 420
264 agacggaagt ggctcaatca gtttggacga atggaaggct tatggacgaa tctctggaat 480
266 ctgctcatca gacgaagacg ccgaaaagac cttcaaacat tgcgatttgg acaacagtgg 540
268 caaacttgat gttgatgaga tgaccagaca acatttggga ttctggtaca ctttgacc 600
270 caacgctgat ggtctttacg gcaattttgt tccttaaaac tcgaaacaaa agcccaaaag 660
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279 <212> TYPE: PRT

280 <213> ORGANISM: Clytia gregaria

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289 20 25 30

292 Asp Ile Asn Gly Asp Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys

293 35 40 45

296 Ala Ser Asp Asp Ile Cys Ala Lys Leu Gly Ala Thr Pro Glu Gln Thr

297 50 55 60

300 Lys Arg His Gln Asp Ala Val Glu Ala Phe Phe Lys Lys Ile Gly Met

301 65 70 75 80

304 Asp Tyr Gly Lys Glu Val Glu Phe Pro Ala Phe Val Asp Gly Trp Lys

305 85 90 95

308 Glu Leu Ala Asn Tyr Asp Leu Lys Leu Trp Ser Gln Asn Lys Lys Ser

309 100 105 110

312 Leu Ile Arg Asp Trp Gly Glu Ala Val Phe Asp Ile Phe Asp Lys Asp

313 115 120 125

316 Gly Ser Gly Ser Ile Ser Leu Asp Glu Trp Lys Ala Tyr Gly Arg Ile

317 130 135 140

320 Ser Gly Ile Cys Ser Ser Asp Glu Asp Ala Glu Lys Thr Phe Lys His

321 145 150 155 160

324 Cys Asp Leu Asp Asn Ser Gly Lys Leu Asp Val Asp Glu Met Thr Arg

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332 Tyr Gly Asn Phe Val Pro

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336 <210> SEQ ID NO: 9

337 <211> LENGTH: 198

338 <212> TYPE: PRT

339 <213> ORGANISM: Clytia gregaria

341 <400> SEQUENCE: 9

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347 Glu Asp Pro Lys Trp Val Asn Arg His Lys Phe Met Phe Asn Phe Leu
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351 Asp Ile Asn Gly Asn Gly Lys Ile Thr Leu Asp Glu Ile Val Ser Lys
352           35           40           45
355 Ala Ser Asp Asp Ile Cys Ala Lys Leu Gly Ala Thr Pro Ala Gln Thr
356           50           55           60
359 Gln Arg His Gln Glu Ala Val Glu Ala Phe Phe Lys Lys Ile Gly Leu
360 65           70           75           80
363 Asp Tyr Gly Lys Glu Val Glu Phe Pro Ala Phe Val Asn Gly Trp Lys
364           85           90           95
367 Glu Leu Ala Lys His Asp Leu Lys Leu Trp Ser Gln Asn Lys Lys Ser
368           100          105          110
371 Leu Ile Arg Asn Trp Gly Glu Ala Val Phe Asp Ile Phe Asp Lys Asp
372           115          120          125
375 Gly Ser Gly Ser Ile Ser Leu Asp Glu Trp Lys Thr Tyr Gly Gly Ile
376           130          135          140
379 Ser Gly Ile Cys Pro Ser Asp Glu Asp Ala Glu Lys Thr Phe Lys His
380 145          150          155          160
383 Cys Asp Leu Asp Asn Ser Gly Lys Leu Asp Val Asp Glu Met Thr Arg
384           165          170          175
387 Gln His Leu Gly Phe Trp Tyr Thr Leu Asp Pro Asn Ala Asp Gly Leu
388           180          185          190
391 Tyr Gly Asn Phe Val Pro
392           195

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/572,175

DATE: 04/10/2006

TIME: 10:39:01

Input Set : A:\LeA 36 839.ST25.txt

Output Set: N:\CRF4\04102006\J572175.raw

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date